

METHOD AND SYSTEM FOR A MODULAR TRANSMISSION CONTROL
PROTOCOL (TCP) RARE-HANDOFF DESIGN IN A STREAMS BASED
TRANSMISSION CONTROL PROTOCOL/INTERNET PROTOCOL (TCP/IP)
IMPLEMENTATION

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ABSTRACT OF THE INVENTION

A method and system for handing-off TCP states in a communication network. Specifically, the present invention
10 allows for handing-off TCP states between nodes in an associated network that is optimized for rare handoff of TCP states. The handoff occurs between dynamically loadable modules that wrap around the TCP/IP stack located at a front-end node and a selected back-end web server. A
15 handoff protocol implemented by the loadable modules works within the kernel level of the existing TCP/IP code. As such, no changes to the existing TCP/IP code is necessary. The loadable modules at the front-end are able to select a back-end web server depending on the content of the web
20 request, coordinate handing off TCP states, and forward packets to the back-end web server. Loadable modules at the selected back-end modify response packets going out to reflect the proper TCP state of the front-end node.

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